Megalophrys montana and *Megalophrys nasuta*.

At the time of the publication of the 'Reptiles of British India' (1864) I had seven examples for examination. Three of them were provided with a rostral appendage, and consequently belonged to "*Ceratophrys nasuta* of Schlegel;" they were *males*. The four others had no such appendage, and proved to be *females*. In this curious coincidence some excuse may be found for my drawing the inference that these examples, so extremely similar to one another in other respects, were of the same species, and that the rostral appendage was a secondary sexual character peculiar to the male (Rept. B. Ind. p. 413).

However, in the course of last month the British Museum received three additional examples, every one of which shows that I have fallen into an error. Two of them (larger than any example I had previously seen, the body being 5 inches long), from Matang in Borneo, have a well-developed rostral appendage, but they are females. The other (probably from Java) is a male and lacks the appendage.

Therefore there can be no further doubt that there exist in reality two species of *Megalophrys* with a somewhat singular distribution; for whilst *M. nasuta* appears to be rather common in Borneo, the Malayan peninsula, and Sumatra, *M. montana* is limited to Java and Ceylon.

I regret to have fallen into this error, the more so as Mr. Darwin, whose attention I had directed to *Megalophrys*, has referred to these frogs in his 'Descent of Man,' 1871, ii. p. 26, and figured the heads of the two species as those of the male and female of the same animal.

XLVIII.—*Note on the Discovery of* Ligidium agile, *Persoon* (=Zia Saundersii, *Stebbing*), *in Great Britain*. By the Rev. A. M. Norman, M.A.

The Crustacean which Mr. Stebbing has described in the 'Annals' for April, p. 286, under the name *Zia Saundersii*, and which was found by him near Copthorn Common, is a well-known European species, which it is astonishing that Mr. Spence Bate, to whom it would appear that it was submitted, should not have immediately recognized. It is an interesting addition to our Crustacean fauna.

The Rev. T. R. R. Stebbing quotes the following words from Spence Bate and Westwood's 'British Sessile-eyed Crustacea'

with reference to the genus *Philoscia*:—"It is a curious circumstance that the animals of this genus, common as they are, and well described by Latreille and Zaddach, should have been unknown to Brandt, Lereboullet, and Milne-Edwards, who have affirmed that the genus ought to be re-united to *Oniscus*, whereas it is in fact more nearly allied in several respects to *Ligia*. The typical species appears to have been figured by Koch under the name of *Ligia melanocephala*, which in his generic table he subsequently altered into the generic name of *Zia*, giving, however, fifteen joints to the antennæ, the flagellum being represented as composed of ten articulations."

Now, while the authors to whom Spence Bate and Westwood refer were undoubtedly wrong in mistaking a certain species of *Oniscus* for the genus *Philoscia*, Bate and Westwood have themselves fallen into as serious an error in merging *Zia*, with its fifteen-jointed antennæ and other strongly marked characters, with *Philoscia*. The genus *Zia* of Koch is synonymous with the previously described genus *Ligidium*, Brandt; and our recently discovered British Crustacean is the typical species, the *Ligidium Persooni*, Brandt, the specific name of which must, however, yield to the prior appellation of Persoon himself, and the Oniscoid must bear the name of *Ligidium agile* (Persoon).

Mr. Stebbing's woodcut is very characteristic, and agrees very closely with the admirable figures of Lereboullet.

The following is the complete synonymy of the species as far as it is known to me. As here in the country I have no means of referring to such works as are not in my own library, I am unable personally to verify four of the references, namely those to Koch, Panzer, Brandt, and Cuvier, the first of which I quote on the authority of Budde-Lund in his 'Danmarks Isopode Landkrebsdyr,' and the last three on the authority of Lereboullet. Zaddach gives *Zia melanocephala*, Koch, as a synonym, and adds "*Zia paludicola* et *Zia agilis*, quas Koch describit, varietates tantum hujus speciei esse videntur."

Ligidium agile (Persoon).

Oniscus agilis, Persoon; Panzer, Faun. Germ. fasc. ix. fig. 24.

Oniscus hypnorum, Cuvier, Journ. d'Hist. Nat. vol. ii. p. 19, pl. xxvi. figs. 3–5; Fabricius, Syst. Entom. Suppl. p. 300.

Ligia hypnorum, Latreille, Gen. Crust. et Insect. vol. i. p. 68, Hist. Nat. des Crust. et Insect. vol. vii. p. 51; Bosc (edit. Desmarest), Hist. Nat. des Crust. vol. ii. p. 179; Desmarest, Consid. Gén. sur la Classe des Crust. p. 318; Lucas, Hist. Nat. des Crust. p. 263.

Lygidium Persooni, Brandt, Conspectus Crust. Onisc. p. 174; Milne-Edwards, Hist. Nat. des Crust. vol. iii. p. 158; Lereboullet, Mém. sur les Cloportides, p. 14, pl. i. fig. 1, & pl. ii. figs. 20–31; Johnsson,

Synop. Frams. af Sveriges Oniscider (1858), p. 10; Zaddach, Synop. Crust. Prussic. Prod. p. 17; Frič, Die Krustenthiere Böhmens (1872), p. 256.

Zia agilis, Koch, Deutschl. Crust. xxxiv. f. 22, 23.

Ligidium hypnorum, Budde-Lund, Naturhistorisk Tidsskrift, 1871, p. 226.

Zia Saundersii, Stebbing, Ann. & Mag. Nat. Hist. 1873, ser. 4. vol. xi. p. 286.

Ligidium agile has a wide European distribution, and has been found in Sweden, Denmark, Prussia, Bohemia, and France. It might therefore have been expected to be found in Great Britain, especially as Latreille's specimens had been received from the shores of the British Channel ("Habitat in littoribus Oceani Britannici, ab entomologo Brébisson mihi transmissus").

The relationship of the species to *Ligia* rather than to *Oniscus* was first pointed out by Fabricius, who, in his 'Suppl. Entom. Syst.,' though he assigns it to *Oniscus*, asks "An potius *Ligia*?"

As has been already mentioned, Koch described two other species, which, however, are perhaps mere varieties of *L. agile*. More recently Schöbel has described a form, under the name of *Ligidium amethistinum*, as distinct from *L. agile*. Perhaps this species also is destined hereafter to reward the careful search of some British carcinologist. Very little has as yet been done among our *land* Crustacea, my lamented friend Dr. Kinahan being the only British naturalist who has paid any attention to the Isopoda Aërospirantia.

XLIX.—*On the* Calcispongiæ, *their Position in the Animal Kingdom, and their Relation to the Theory of Descendence.*

By Professor Ernst Häckel.

[Continued from p. 262.]

II. The Calcispongiæ and the Theory of Descendence.

1. *Principles of Classification.*

The task which we had set before us as the primary object in this monograph of the Calcispongiæ, *the analytical solution of the problem of the origin of species*, has been followed out in different ways in the first and second volumes. In the first volume, and especially in its second section, the "Morphology of the Calcispongiæ," I have endeavoured to describe all the